



TB TID-BITS



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2011 TB Symposium: New Hope and Horizons

World TB Day Event!

On **March 24, 2011**, ISDH and American Lung Association in Indiana will host the **biennial TB symposium** at **Wyndham Indianapolis West hotel** located near the Indianapolis International Airport. The TB symposium will target physicians, public health nurses, tuberculin skin test (TST) readers, and other interested parties. The TB symposium will have local, regional, and national speakers present on such topics as interferon-gamma release assays (IGRAs), TB/HIV coinfection, and TB in children and adolescents.

Scholarships will be made available to special audiences listed below:

- **One free registration** will be granted to **each LHD** in Indiana.
- **Several private scholarships** will also be offered for this event.

More information to follow at the **American Lung Association in Indiana website** at <http://www.lungusa.org/associations/states/indiana/>.

2-1-1 for the Healthcare Community— by Shari Morgan, Director Operations, Connect2Help

2-1-1 is an easy to remember number for helping people find help. Much like using 911 to call for emergency police or fire department help, the three digit dialing code of 2-1-1 offers information and referral to local, state and national human services – helping callers find child care, employment, food pantries, discount prescriptions, addiction prevention programs for their teenage children, affordable housing options, or support groups. 2-1-1 is available every hour of every day to professionals and the public needing information on essential social services. As of August 2010, the option of dialing 2-1-1 is available to over 246 million Americans (82% of the entire population) covering all or part of 47 states plus Washington DC and Puerto Rico. **Indiana coverage is provided by 14 centers throughout the state and covers over 95% of all Hoosiers.**

2-1-1 agencies in Indiana work closely with nonprofit, faith-based and governmental offices throughout the state to ensure that we have the most accurate and up to date information on resources available to our callers.

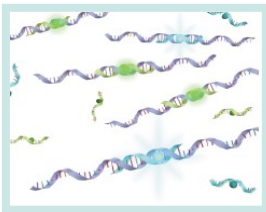
For more information please visit: www.connect2help.org.



Research at Columbia University concluded that providing social services for latent tuberculosis infection (LTBI) patients will help to ensure completion of treatment more than educational programs.

Incentives and Enablers for LTBI or TB patients
Low Income Home Energy Assistance Program (LIHEAP) has **more than \$670 Million in additional funding** provided by **US Department of Health and Human Services** for more information go to: <http://www.hhs.gov/news/press/2010pres/12/20101210b.html>

FREE Phone & 250 FREE Voice Minutes Each Month to qualified individuals for more information go to: <http://www.assurancewireless.com/Public/Welcome.aspx>



Rapid Detection of Mycobacterium Tuberculosis Complex

by Jessica Gentry, ISDH Serology/TB Lab Supervisor

2010 HIV Status
53 HIV Tests Offered
16 HIV Tests Not Offered
22 HIV Status Unknown/
Missing

The ISDH TB Laboratory can now identify Mycobacterium tuberculosis complex (MTBC) much more quickly than ever before, thanks to the new Polymerase Chain Reaction (PCR) assay. Due to the lack of an affordable, commercially available PCR test for TB, the ISDH TB Laboratory adopted the real time PCR assay from another State Public Health Laboratory and implemented it in 2008, only for smear positive sputum specimens initially. In 2010, the assay was expanded to include smear negative sputum specimens, and is currently performed for one sputum specimen for each new patient. In the past, the ISDH Labs had to rely on AFB smear results alone for rapid detection, which are not nearly as specific as PCR, since patients with infections other than MTB may test smear positive. The most reliable means of confirming MTB infection has always been to culture the bacteria from a primary specimen, which can take several weeks, because TB is such a slow growing organism. ISDH's PCR test is performed on processed sputum specimens, and results can be ready within 1-2 days of the specimen arriving at the ISDH Labs.

This molecular based assay is a real-time PCR assay, which is testing for a specific region of the MTBC genome. Since the assay detects both live and dead bacteria, it cannot distinguish between new infections, and recent past infections, so it is only used for patients who have not already been identified as having TB. Because of the cost of the testing materials, as well as the manpower needed to perform it, it is currently being run only twice per week.

Due to some grant funds recently awarded to the ISDH TB Lab by the Association of Public Health Laboratories (APHL), the ISDH Labs plans to expand its existing rapid molecular testing in early 2011. The first expansion will allow the ISDH TB Lab to test all sputum specimens from new patients, instead of only one. Testing a larger number of specimens per patient should increase the chances that the lab will detect new TB cases more rapidly. The second expansion involves validating a more automated extraction procedure for PCR, which will allow ISDH

ISDH Lab Goal for TB Specimen Transit Time
75% of specimens will be received within two days of collection

Goal Status as of 10/1/10-12/31/10
56.2 % received within two days of collection

LHDs that met ISDH Lab Goal for TB Specimen Transit Time as of 10/1/10-12/31/10

Hamilton - 100%
Hancock - 100%
Vanderburgh - 100%
Warrick - 87.5%
Marion - 85.7%
Huntington - 83.3%

Labs to perform it three times per week, meaning that results will be ready even more quickly than they are now. The test is also being validated for use on culture samples, including positive MGIT tubes and isolates referred from other laboratories.

The last planned expansion is the addition of a rapid test for antibiotic resistance, called pyrosequencing. The assay will be able to be performed on all PCR positive samples that have high MTB concentrations, and will be checking for genotypic antibiotic resistance to both Isoniazid and Rifampin. The test is able to detect up to 90% of MTBC strains resistant to Rifampin and up to 65% of strains resistant to Isoniazid, depending on the patient populations. However, the phenotypic method, that is, the traditional culture drug susceptibility

test, will still be the method used for final confirmation.

The ISDH Lab staff is excited about all of the additions to its rapid detection of Mycobacterium tuberculosis complex and Rifampin and Isoniazid drug resistance, and we are looking forward to continuing to contribute to the reduction and elimination of new TB cases in Indiana.

LimsNet Target Dates for TB

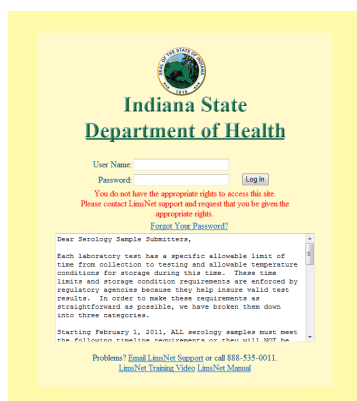
ISDH TB/Refugee Health Division will require all LHDs to use LimsNet for all of their ISDH lab submissions. The roll out dates for usage of LimsNet is as follows:

- **January 31, 2011** for all lab submissions on current suspects/cases of TB.
- **February 15, 2011** for all health departments to have registered to submit specimens electronically.

LimsNet website:

For assistance with LimsNet please use the web site, call 317-921-5506, 1-888-535-0011, or email the help desk at LimsAppSupport@isdh.in.gov.

<http://limsnet.isdh.in.gov>



TB Staff Highlight: Ed Harris

Degrees: B. S. (Medical Technology), B. S. (Chemistry), M. S. (Chemistry)

Job Title: Microbiologist II

How long have you been with TB control and prevention? I have been working at the ISDH TB Lab for about 5 ½ years. Prior to working at ISDH, I worked at Indiana University Hospital in the Microbiology Lab for 24 years.

What do you like best about your job? Helping to diagnose people with TB

What are your hobbies? Gardening, boating, hiking, cooking, reading and watching DVDs

Where do you see yourself in five years? Retired

What is your favorite TB topic? Methods of identifying Mycobacterium tuberculosis in specimens



Ed Harris

LHD Spotlight: Vanderburgh County



Vanderburgh County is located in the southwest corner of Indiana with a blend of rural and urban areas with a population of 171,922. Vanderburgh County Health Department (VCHD) is located in Evansville, IN. VCHD TB Control is under the Communicable Disease Division. The structure includes a health officer, pulmonologist, compound pharmacist (as needed), TB case manager, and secretary/bookkeeper with six backup staff available as well as a TB clinic with an x-ray machine and processor. The TB clinic takes referrals from surrounding counties for x-rays and follow-ups for LTBI, TB suspects, and TB cases. One of the VCHD employees holds a chest radiation certificate and the county contracts with an x-ray company to perform x-rays and readings. Contracts with local



laboratories allow for discounted laboratory services. There is also a contract with Language Line Services for interpreting services which can be helpful in performing directly observed therapy (DOT). VCHD has good working relationships with their county correctional facilities (youth and adults), the federally qualified health center homeless health team, and local homeless shelters.

VCHD possess the ability to balance TB responsibilities while assisting with vaccinations for students to remain in compliance with new regulations. Another strength of the TB program is its history of working with MDR-TB, its paperwork, follow up, and follow through when a client relocates to another state.

TB nurse case manager, Celia Rizen stated, "TB can be challenging, interesting, hair-pulling-out, and fun. My path has crossed with a wide variety of clients that I probably would have never met. I have met and been able to share experiences with other health department/TB nurses in Indiana and learned so much from them. I also appreciate all of the support, advice, and information that I have received from my regional nurse and from all those with ISDH TB/Refugee Health Division."

A Crash Course in Cohort Review Process: 101 by Shanica Alexander, Centers for Disease Control and Prevention Public Health Advisor

Cohort Review Process is...

- Standardized review of the overall case management in a group setting
- Collection of TB cases and their contacts
- Based on a specific time period
- Review of cases 6-9 months after they were counted (usually close to end of treatment)
- Review of specific case management outcomes

Cohort Review Process is not...

- Replacement of routine case management
- Beneficial without setting and monitoring program objectives and targets
- Beneficial without creating tailored materials to track program target progress
- Beneficial if cohort review findings are not shared with program staff and other key stakeholders
- A micromanagement tool to monitor staff's job performance
- Beneficial without all staff's input and involvement

ISDH TB Program conducts quarterly cohort reviews involving; Division Director, Medical Consultant, Regional Nurse Consultants, TB Epidemiologist, CDC Public Health Advisor, LHD Nurse Case Managers. The Regional Nurse Consultants and LHD Nurse Case Managers present randomly selected cases and receive quarterly progress reports for their region/ local area. State TB staff will work with the LHD TB Staff to help set realistic program improvements and goals. LHD Nurse Case Managers and Regional Nurse Consultants can also provide insight and recommendations for ISDH TB Program.

To learn more about the cohort review process, contact Shanica Alexander at 317-234-2885 or ShAlexander@isdh.in.gov.

2010 TB MANUAL IS NOW ONLINE!

<http://www.TB.In.gov>

Case Management Study– A Pediatric Case

Submitted by Joy Hardacre, ISDH TB Regional Nurse Consultant

Cody Brown is a 9 month old contact of his uncle Charlie Harper, an active case of TB. A tuberculin skin test (TST) reading is negative. The child has a cough. The chest x-ray shows some density in the lower lobes. The child does not appear to be sick and his appetite is good.

Could this child have TB? What are your recommendations?

Answer Listed Below:

Indiana State Department of Health TB Control Program

2 North Meridian Street, 6-D
Indianapolis, IN 46204

Phone: 317-233-7434

Fax: 317-233-7747

Web site:

<http://www.TB.In.gov>

E-mail:

tbcontrol@isdh.in.gov

Butler University TB
Medication HOTLINE 317-
940-TBTB or 317-940-8282

TB Reminders and Events

Cohort Review Process Archived Webinar—

The New Jersey Medical School Global TB Institute presented: "Best Practices in TB Control #1: Introduction to the TB Cohort Review Process" go to: <http://www.umdnj.edu/globaltb/audioarchives/tbcohort.html>

World TB Day Event—

The 2011 TB Symposium will be held on March 24, 2011 at Wyndham Indianapolis West hotel more details to follow at <http://www.lungusa.org/associations/states/indiana/>

TB Intensive Workshop—

The New Jersey Medical School Global TB Institute will offer their TB Intensive on April 12-14, 2011 in Newark, NJ. For more information about the course and to apply go to: <http://www.umdnj.edu/globaltb/courses.htm>

Helpful Resources

Feedback is welcomed—send comments, ideas, and recommendations for future contributions to Erica Bailey, Newsletter Editor at eballey@isdh.in.gov

Thank you local health departments (LHDs) for your hard work in getting **LTBI medication orders** submitted.

However, **incomplete LTBI orders** will now be **faxed a letter** instead of receiving a phone call from ISDH.

- New Jersey Medical School Global Tuberculosis Institute (GTBI)- <http://www.umdnj.edu/globaltb/home.htm>

The GTBI is the Regional Training and Medical Consultation Center (RTMCC) for Indiana and the US northeast region providing training, technical assistance, & medical consultation for TB.

- Heartland National TB Center 2011 training schedule is now available including a national webinar on "Handling TB on the College Campus" found at <http://www.heartlandntbc.org/training.asp>
Heartland is another TB RTMCC.

- American Lung Association (ALA) in Indiana Tuberculosis Program -<http://www.lungusa.org/associations/states/indiana/events-programs/tuberculosis-education-3.html>

The ALA in Indiana is the administrator of the tuberculin skin test (TST) program in Indiana.

- The Cross Cultural Healthcare Program - <http://www.xculture.org/mission.php> is a training and consultation group providing a variety of at cost multilingual publications to enhance health professionals ability to be culturally and linguistically appropriate.
- The Refugee Health Information Network has health information in multiple languages - http://www.rhin.org/health_info.aspx

Reminder, the **Operations Manual for Screening TB in County Jails (tool kit)** was provided as a **resource** to **LHDs** and **jails** to **encourage communication** between the two groups.

Answer to Case Study above: Yes, this child could absolutely have tuberculosis. The recommendation is to start this little guy on three drug therapy. Even though the skin test is negative, the chest x-ray is strangely suspicious of TB and since he is a direct contact of an active case, he should be treated.